Friends of the Earth

July 1, 2009

Matthew Crosby
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

Re: Comments on Light-Duty Vehicle Electrification Paper

Dear Mr. Crosby,

Friends of the Earth (FoE) appreciates the opportunity to comment on the Policy and Planning Division white paper entitled "Light-duty Vehicle Electrification in California: Opportunities and Barriers" (white paper). The white paper does an outstanding job of summarizing the benefits of electric transportation (ET), and the opportunities for, and potential barriers to, electrifying our light duty fleet. The CPUC's attention to these issues can help drive a successful shift to PEVs, a technology which can simultaneously address the problems of oil dependence, fuel price shocks, air pollution, and climate change, especially when linked to an increasingly cleaner grid.

Following are general comments on areas of the white paper we believe are priorities for future CPUC and stakeholder discussion and analysis.

CPUC Electric Transportation Regulatory Proceeding - The breadth of issues raised in the white paper underscores the need for a CPUC forum focused on electric transportation. Such a forum will allow ET issues to be addressed in much greater depth than is likely to occur in the Smart Grid proceedings and with a greater range of ET stakeholder participation. To the extent the CPUC undertakes such a proceeding, it will be beneficial to clearly delineate issues that will be addressed in the ET forum, issues that will be addressed in the Smart Grid proceedings, and issues that will overlap forums.

Load Management - The white paper at page 9 notes a range of possible negative impacts associated with ET, including the potential to increase total energy demand, alter peak load shapes, impact transmission and distribution, and increase the electricity sector's emission profile. (p.9). These potential negative impacts highlight the importance of developing measures that allow, incentivize, and/or require the management of total and peak PEV power demand, as well as the need to incentivize efficient electric vehicles and their efficient use.

Renewable Power - PEVs have the potential to effectively utilize as well as increase the benefits of renewables, a potential that we believe should be maximized. As an example, by linking electric vehicle charging times and rates to peak wind or solar generation, EVs can use

intermittent renewable energy that would otherwise be lost, increasing renewable resource use, decreasing its cost, and driving increased investment in the clean energy sector. Increased use of renewables will also reduce the impacts of load growth and help mitigate on-peak PEV demand.

As noted in the white paper, the CPUC can lead in exploring ways in which financing programs for energy efficiency and roof-top solar or other renewables can be tied to support for PEVs. We support the CPUC's recommendation to institute a Rulemaking on policy opportunities such as including PV arrays over charging stations or promoting off-peak charging that takes advantage of overnight wind resources. The white paper also highlights the opportunity to integrate PV energy for transportation at the micro-level through California Solar Initiative policy accommodations. As noted in the white paper, particularly for PEV battery charging that cannot be avoided, integrating PEV load into the CSI could have the impact of reducing charging impact during high demand, on-peak hours." (pp. 66-67).

Incentive Priorities - A number of possibilities exist to incentivize the move toward ET. It is important to have an open discussion of what those opportunities are and to assign priorities for action. As an example, providing vehicle incentives may be less of a priority than incentivizing infrastructure development, assisting homeowners with customer-side infrastructure costs, or creating educational campaigns centered on PEV benefits.

One issue not discussed in great depth in the white paper is the historically important role utilities have played in motivating consumers to dramatically increase energy efficiency. As demonstrated by those programs, utilities can be very effective in educating and incentivizing consumers. Encouraging utilities to play a similar role with ET is likely to increase the amount and speed of PEV adoption.

Infrastructure - Infrastructure development is an important issue that deserves significant attention. From public infrastructure to home infrastructure, there are a variety of issues to be addressed. We support strong infrastructure development programs, including public infrastructure incentives. With regard to consumer infrastructure, we are interested in further discussion about decreasing consumer barriers associated with home infrastructure, including the possible costs and delays associated with installation of required submeters or necessary wiring upgrades. Although seemingly minor, these extra steps, their costs, and the potential frustration attendant with them may present a significant hurdle to new purchasers of PEVs. We support incentives or financing options for costs associated with this infrastructure and the development of systematic and streamlined installation policies.

In addition, with regard to public charging, we believe it is necessary to create a universal payment system that allows customers to use a single payment method, such as an RFID tag, to pay for all public charging. This will ensure that fueling PEVs is as easy as fueling a conventional gasoline vehicle, no matter what entity installs and maintains the meter. Standardization of charging infrastructure operability is also critical to ease of customer use.

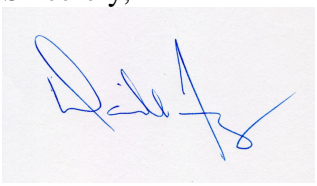
Rate Design - We support addressing rate design issues, including block pricing. A prudent price signal scheme must be developed in order to incentivize the adoption of PEVs while also

balancing the long term interest in ensuring efficient use of energy. Similarly, TOU rate design is a critical issue for managing PEV customer load and should be a high priority for CPUC focus.

Ratepayer Benefits - We support the CPUC's acknowledgement of the various benefits ET can provide to ratepayers, including reduced air pollution, reduced CO2 emissions, decreased petroleum consumption, load leveling, and future ancillary services. We hope to see these benefits reflected in CPUC and utility policies, including incentives, on-bill financing, etc.

Thank you for you consideration of these comments. I look forward to working with the CPUC on these important issues.

Sincerely,



Danielle R. Fugere
Regional Program Director